Supreme Court, U.S.
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No. 86-1680

IN THE

Supreme Court of the United States

OCTOBER TERM, 1987

NICOLET INSTRUMENT CORPORATION,
a Wisconsin corporation,
Petitioner,

vs.

BIO-RAD LABORATORIES, INC.,
a Delaware corporation,
Respondent.

OPPOSITION TO PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

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STATEMENT OF THE CASE

Respondent[1] ("Bio-Rad") deems it necessary to supplement Petitioner's ("Nicolet") statement of the case to correct inaccuracies and omissions.

After the jury rendered its verdict in this case, finding all seven claims of the '515 patent valid and infringed, Nicolet

[1] Pursuant to Rule 28.1, Respondent identifies International Plant Research Institute; Orimbio, S.A., Paris, France; and O.E.M. Systems, Tokyo, Japan as affiliates.

moved for a new trial. One of Nicolet's arguments in support of its motion was that Bio-Rad had abused the discovery process. The trial judge denied the motion. On the first appeal in this case, the Court of Appeals For The Federal Circuit affirmed the denial of the motion, stating:

> The disputed evidence was discovered during trial and the documents were entered as evidence in the case. The record indicates Nicolet had an adequate opportunity to examine witnesses necessary to explain the significance of these documents and to present arguments regarding their importance on the validity issues. *Bio-Rad Laboratories, Inc.* v. *Nicolet Instrument Corporation*, 739 F.2d. 604, 615 (Fed.Cir. 1984) ("*Bio-Rad I*").

The Federal Circuit affirmed the verdict and judgment, but vacated the District Court's denial of prejudgment interest and remanded the case to the District Court for "an award of prejudgment interest or a determination that some specific justification exists for prejudgment interest." 739 F.2d at 618.

Nicolet claims that, on remand, Bio-Rad requested "the highest rate of interest for the longest period of time allowable under the law". (Petition p.3). This is inaccurate. Bio-Rad initially requested interest at a 15% flat rate, and offered the court two additional calculations, utilizing (1) the corporate bond rate and (2) the prime rate. All three calculations resulted in approximately $750,000.00 interest. (Bio-Rad's Memorandum in Support of Motion to Award Prejudgment Interest, pp. 3-6 App 6-11). Bio-Rad expressly indicated to the court that its actual borrowing rate during the period in question was even higher (approximately 1% over the prime rate, resulting in over $900,000.00 interest), but offered to accept any of the other, more objective measures of interest rates (Bio-Rad's Memorandum in Support of Motion to Award Prejudgment Interest, pp. 20-22 App 12-15). The court requested a revised calculation based on the average corporate borrowing rate, calculated from the date of each infringement, adjusted for the customary time lag between delivery and payment. (Transcript of April 12, 1985 hearing, 82:6-12 App

1-2). In response, Bio-Rad submitted a calculation based on the average annual prime rate, supported by evidence that this was the best indication of what the average corporate borrower paid. (Bio-Rad's Supplemental Memorandum in Support of Motion to Award Prejudgment Interest App 16-20). Nicolet did not dispute or rebut this evidence. The revised calculation incorporated a 60 day time lag between delivery and payment, and resulted in less interest than any of the initial calculations ($737,074.00, as of a later date).

The District Court acknowledged the impropriety of using prejudgment interest as a postjudgment penalty or as sanctions. (Transcript of September 13, 1985 hearing, 7:14, 11:20 App 3-5). Nevertheless, and despite the uncontested evidence that: (1) the infringement had commenced 5 years earlier; and (2) interest rates averaged over 15% during the relevant period, the court awarded prejudgment interest for only nine months at the rate of 7%, for a total of $161,595. The court based its decision on two grounds: (1) that Bio-Rad had unduly delayed the commencement of the trial, and (2) that Bio-Rad had engaged in dilatory action during discovery.

On appeal, the Federal Circuit noted that the record is ambiguous regarding the sequence of actions relied on by Nicolet to support its allegations of abuse of discovery, but the court did not review the finding that Bio-Rad had engaged in dilatory action during discovery. Instead, the court assumed *arguendo* that the finding was correct, and ruled that such a finding cannot, by itself, justify limiting prejudgment interest. Specifically, the Federal Circuit reversed the District Court for abuse of discretion because (1) the finding that Bio-Rad had delayed the trial was clearly erroneous, because the trial was not delayed, and (2) the alleged dilatory action during discovery, without resultant delay in the trial, does not justify limiting the period or the rate of prejudgment interest. *Bio-Rad Laboratories, Inc.* v. *Nicolet Instrument Corp.*, 807 F.2d 964 (Fed.Cir. 1986) ("*Bio-Rad 2*").

In its opinion, the Federal Circuit did point out that the District Court had denied Nicolet's motion for a new trial based

on these allegations of abuse of discovery, and that it had upheld that ruling in the prior appeal. Bio-Rad emphatically denies that it abused discovery.

I.

THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT CORRECTLY APPLIED THIS COURT'S DECISION REGARDING PREJUDGMENT INTEREST TO THE FACTS OF THIS CASE

In this case, the Federal Circuit held that the District Court had abused its discretion by limiting prejudgment interest as a sanction for alleged abuse of the discovery process by Bio-Rad, the prevailing plaintiff in a patent infringement case.[2] 807 F.2d at 968. Certiorari should not be granted because the Federal Circuit's holding is perfectly consistent with this Court's opinion in *General Motors Corp.* v. *Devex Corp.*, 461 U.S. 648 (1983) ("*Devex*").

In *Devex*, this Court considered the standard governing the award of prejudgment interest in patent infringement cases under 35 U.S.C. § 284 and rejected the punitive view of the purpose of prejudgment interest. The Court analyzed the legislative history and the language of 35 U.S.C § 284 and ascertained the "overriding purpose" of Congress to afford patent owners complete compensation for patent infringement. 461 U.S. at 655. Rejecting the "*Duplate*" standard, under which prejudgment interest could not be awarded (where damages were unliquidated) absent bad faith or other exceptional circumstances, the Court ruled that prejudgment interest should ordinarily be awarded to afford the plaintiff full compensation for the infringement. The District Court has some discretion; it may, for example, limit prejudgment interest in cases where the patent owner has unduly delayed prosecuting the lawsuit. The Court indicated that there *may* be other

[2] The Federal Circuit also found that the District Court had abused its discretion by relying on a clearly erroneous finding of fact that Bio-Rad's conduct during discovery had delayed the commencement of the trial. (The scheduled trial date was met with only one day's delay.) 807 F.2d at 968. Nicolet does not raise this issue in its petition for certiorari.

circumstances in which it *may* be appropriate to limit or deny prejudgment interest, but declined to delineate those circumstances. The Court held only that prejudgment interest should be awarded absent some justification for withholding an award. 461 U.S. at 657.

Since *Devex,* the Federal Circuit has overseen the effective application of the law of prejudgment interest under 35 U.S.C. § 284 by the District Courts. The Federal Circuit acknowledged the compensatory purpose of prejudgment interest in reversing an award of interest on the punitive portion of the damage award. *Lam, Inc.* v. *Johns-Manville Corp.,* 718 F.2d 1056, 1066 (Fed. Cir. 1983). In *Radio Steel & Mfg. Co.* v. *MTD Products,* 788 F.2d. 1554 (Fed. Cir. 1986), the Federal Circuit upheld the District Court's ruling that the patent holder's failure to remove patent markings from its products after the expiration of the patent did not justify limiting prejudgment interest. The Federal Circuit reasoned that, under *Devex,* a justification for limiting prejudgment interest "must have some relationship to the award of prejudgment interest". 788 F.2d at 1558. The Federal Circuit then applied that reasoning to the facts of the present case to hold that alleged dilatory action during discovery, without resultant delay in the trial, does not justify limiting prejudgment interest.

Nicolet contends that the Federal Circuit has "unreasonably narrowed" the discretion of the District Court. Nicolet claims that the Federal Circuit has "engrafted" a new condition onto the *Devex* standard, and that the Federal Circuit has limited the District Court's discretion to cases where the patentee delays the trial. (Petition, p.6) This is a distorted reading of the Federal Circuit's opinion. The opinion is consistent with *Devex* and, like *Devex,* it leaves open the possibility that there may be other justifications for limiting prejudgment interest.

The Federal Circuit's interpretation of 35 U.S.C. § 284 and its application to specific cases is totally consistent with this Court's opinion in *Devex.* Congress did not intend for prejudgment interest to be used to punish either party for conduct unrelated to full compensation for patent infringement. This

Court recognized this in *Devex*, accepting the view of prejudgment interest as "delay damages". 461 U.S. at 655, note 10. It follows from this view that prejudgment interest can be limited, or even denied altogether, where the plaintiff has been responsible for his own delay damages.[3] It does not follow that prejudgment interest can be limited as a punishment for conduct unrelated to the award of prejudgment interest.[4] This is particularly clear where, as here, there are other remedies available for the alleged misconduct.[5]

Furthermore, the Federal Circuit has not foreclosed the possibility that there may be other circumstances (other than delay in prosecution) in which it may be appropriate to limit prejudgment interest. It has only determined that abuse of discovery which does not contribute to the plaintiff's delay damages is not one of those circumstances. Although Nicolet finds it "difficult to envision" a situation where the court can exercise its discretion to limit prejudgment interest, (Petition, p.7), there is no need to do so in this case. It is only necessary to determine, as did the Federal Circuit, that this is not such a situation.

Even if abuse of discovery, without delay in the trial, can ever justify limiting prejudgment interest, it would not be appropriate to limit interest under the circumstances of this case. The Federal Circuit found the record ambiguous regarding Nicolet's allegations that Bio-Rad wrongfully withheld documents. 807 F.2d at 966. Moreover, Nicolet had sought a new trial on the basis of its allegations of abuse of discovery, and the District Court denied that request. The Federal Circuit specifically upheld that ruling in the first appeal. The Federal

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[3] As Professor Chisum notes, "A fact such as delay by the patent owner logically relates to measuring loss under the ancient principle of 'volunti non fit injuria' ". Chisum, *Patents*, p. 20-172.

[4] The implication of Nicolet's reasoning is evident from Nicolet's proposal that prejudgment interest be used "to exert discipline over the litigation process". This kind of punitive use of prejudgment interest was rejected in Devex, and has not been reestablished by Congress.

[5] Other remedies available for abuse of discovery include: sanctions under F.R.C.P. 11 or 37, a mistrial, or a suspension of the trial, none of which were sought by Nicolet; Nicolet did make a motion for judgment NOV or a new trial, and this motion was denied.

Circuit thus accurately characterized Nicolet's argument as an attempt to relitigate issues that have already been settled. 807 F.2d at 970.

II.

THIS IS NOT AN APPROPRIATE CASE FOR RECONSIDERATION OF THE VIEW THAT PREJUDGMENT INTEREST MAY BE LIMITED WHERE A STRONG CHALLENGE TO THE PATENT IS PRESENT

Nicolet contends that this is an appropriate case for this Court to consider the applicability of Justice Stevens' concurring opinion in *Devex*. (Petition, p.8-9) In that opinion, Justice Stevens proposed that "the trial court may properly take into account the nature of the patent and the strength of the defendant's challenge." 461 U.S. at 658. This is not an appropriate case for reconsideration of this view because (1) neither the trial court nor the appellate court relied on that view and (2) the "strong challenge" reasoning is not applicable to the facts of this case.

In its opinion in the present case, the District Court did not refer to, or in any way rely on, the nature of the patent, or the strength of Nicolet's challenge to the patent, as justification for limiting prejudgment interest. On review, the Federal Circuit acknowledged this and explicitly restricted its review to the District Court's stated reasons. 807 F. 2d at 969. The Federal Circuit did, in dicta, note that it had "implicitly rejected" this view in *Radio Steel,* when it ruled that the justification for limiting prejudgment interest must have some relationship to the award of prejudgment interest. The Federal Circuit further noted that the arguments made by Nicolet regarding its "strong challenge" are substantially a repeat of those it made in contending that its infringement was not willful, and that Nicolet should not benefit twice from those arguments.

Despite this dicta, this is not an appropriate case for examining the question of whether the "strength of the challenge" can be a basis for limiting prejudgment interest. The District Court did not take into account the strength of the challenge and it did not make any findings with regard to that issue. Furthermore, Nicolet's attempt to equate its "many challenges to patent validity and infringement" (Petition, p.8) to a "strong challenge" is unconvincing when this case is compared to *Devex*. In *Devex*, the District Court found the patent invalid, then the Circuit Court reversed. Then a different District Court found that there had been no infringement, and another Circuit Court reversed. After the second remand, the District Court entered judgment for the plaintiff and awarded prejudgment interest. The Circuit Court and the Supreme Court affirmed. By comparison, in the present case, Nicolet challenged validity and infringement (1) in a pretrial motion for summary judgment, (2) in a jury trial, (3) in post trial motions, and (4) on appeal to the Federal Circuit, and lost its challenge on each occasion. Nicolet has not succeeded in obtaining one single ruling or verdict that even one of the seven patent claims was invalid or not infringed. Although Nicolet raised an array of challenges to validity (anticipation, obviousness, incorrect inventor, failure to disclose the best mode, and inoperative disclosure) and infringement (on two theories), the Federal Circuit disposed of all of them in five pages. *Bio-Rad I*, supra, 739 F.2d at 610-614. The fact that the Federal Circuit "dealt seriously" with Nicolet's many defenses, "finding none of them frivolous" (Petition, p.9), does not equate to a "strong, well-justified challenge" to the patent.

This case is therefore not an appropriate case to consider whether the strength of the challenge to the patent can be taken into account by the District Court in determining prejudgment interest because (1) the District Court did not take this factor into account, (2) the Federal Circuit's reversal of the District Court was not based on this factor, and (3) even if this view is accepted by the Court, it would have no application to the present case.

III.

THE ISSUE RAISED BY THIS CASE DOES NOT MERIT A GRANT OF CERTIORARI

The standard governing the award of prejudgment interest in a patent infringement suit is a significant issue. However, there is no purpose to be served by reconsideration of this issue by this Court in the context of the present case. As recently as 1983, in the *Devex* case, this Court considered this issue and provided its interpretation of the intent of Congress in enacting 35 U.S.C. § 284. The guidance provided by the Court at that time has contributed to the effective enforcement of the patent laws and to the full compensation of patent holders for acts of infringement. The present case involves a routine application of the *Devex* decision. The Federal Circuit applied this Court's reasoning to rule that prejudgment interest cannot be limited as a punishment for alleged discovery abuses. Any other decision would have been a return to the pre-*Devex* view of prejudgment interest as punitive, rather than compensatory, and would be in conflict with *Devex*.

CONCLUSION

For the reasons stated above, Bio-Rad respectfully requests this Court to deny the petition for certiorari.

Respectfully submitted,

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TOWNSEND & TOWNSEND

IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

BEFORE: THE HONORABLE LLOYD H. BURKE, JUDGE

BIO-RAD LABORATORIES, INC., a Delaware corporation, *Plaintiff,* vs. NICOLET INSTRUMENT CORPORATION, a Wisconsin corporation, *Defendant.*	**C-84-5002 LHB SAN FRANCISCO, CA APRIL 12, 1985**

TRANSCRIPT OF PROCEEDINGS

MR. COOK: There's no need to cut it that fine.

MR. ALLGEYER: Well, your Honor, I certainly am willing to abide by the court's opinions, and so forth, and —

THE COURT: Don't have much choice,

MR. ALLGEYER: That's true. And I take it —

THE COURT: Well, I think that Mr. Cook can anticipate the ruling. You get what a reasonably sound borrower would have had to pay under the circumstances, at the particular time of the various sales — or rather, the payment made on the various sales. You apply whatever rate you think is reasonable, in the light of what I've said. Either the interbank plus, the prime rate flat, or something between or akin to. Then you — he can do your work for you.

MR. ALLGEYER: Okay.

MR. COOK: Thank you, your Honor.

MR. ALLGEYER: Thank you, your Honor.

THE COURT: Ought to do something for your money, Mr. Cook.

All right, will you submit the order, Mr. Cook?

MR. COOK: Sure.

THE COURT: He's got an office here. You don't.

You have no idea when you'll be back for further consideration of your argument?

MR. COOK: We've noticed it for May 30th, but I will confess that I didn't check with your office before we did it.

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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

BEFORE: THE HONORABLE LLOYD H. BURKE, JUDGE

BIO-RAD LABORATORIES, INC., a Delaware corporation, *Plaintiff,* vs. NICOLET INSTRUMENT CORPORATION, a Wisconsin corporation, *Defendant*	**CIVIL ACTION NO. C-81-2553-LHB**

REPORTER'S TRANSCRIPT

September 13, 1985

Reported by
MARIE WILLIAMS

Without having to pay interest on interest with no consideration given to the fact that the pretrial delay of Bio-Rad Producing was what might be called delay constituting abuse of the discovery process, or resistance to discovery process.

Some of the briefs are a little heated. I would hope that they can be disposed of in a dispationate fashion. My office demand that I hear what you have to say. At any rate, go along with your theory. It should be considered as pre-trail evidence and should be considered, but not for the purpose of changing the verdict or determining what would otherwise would be the appropriate amount of interest. Quite obviously the denial of pre-judgment interest is, in a sense, a penalty that cannot be imposed. I don't know what alternative to give something to which they are not entitled, although they may submit it.

MR. SHERAN: If the court please, in light of the court's comments, I am going to limit my argument to one of four points which I intended to articulate orally today.

This court has discretion to allow, or disallow, pre-judgment interest, then if it allows it to determine the rate, whether simple or compounded.

THE COURT: If I don't I'm going to find out.

MR. SHERAN: I'll pass over that.

* * *

Different sort of treatment than if abuse of the discovery process involves something tangential or not important.

THE COURT: I think you are right at the heart of my dilema. Where does consideration of the period of delay come into appropriate discussion?

If you say it caused the loss of the case, and there shouldn't be any interest, you are imposing sanctions. We should consider it in the light of its prospective use to the disadvantage of the foot dragging litigant and use it as an explanation for why resistance to discovery occurred. I think that's an appropriate means by which the court might determine whether or not that that period should be excluded from consideration for it.

MR. SHERAN: In this—

THE COURT: I am not articulating myself—my ideas very well, but I hope you get the idea.

MR. SHERAN: I do, if the court please.

THE COURT: Not attributed to sanctions, but something attributed to foot dragging.

MR. SHERAN: I do, if the court please.

And it behooves me to try to present in as short a period of time as I can (because I think of the strains on the court's time on this particular day).

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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

BIO-RAD LABORATORIES, INC.,
a Delaware corporation,

Plaintiff,

v.

NICOLET INSTRUMENT CORPORATION,
a Wisconsin corporation,
Defendant

CIVIL ACTION NO. C81 2553 LHB
BIO-RAD'S MEMORANDUM IN SUPPORT OF MOTION TO AWARD PREJUDGMENT INTEREST UNDER 35 U.S.C. § 284
Date: May 10, 1985
Time: 9:30 A.M.

B. Bio-Rad's Claim For Prejudgment Interest

Bio-Rad's prejudgment interest calculation is set out in Schedule A, following this page. The manner and basis for the calculation is set forth in paragraphs II.B.1-2, *infra*.

1. Bio-Rad Has Selected 15% As The Rate of Prejudgment Interest

At trial, the only evidence bearing on what might be an appropriate rate of prejudgment interest was the testimony of Bio-Rad's controller Peter Leigh who stated that, on the average, from early 1980 through 1982, Bio-Rad paid 15% interest on its corporate borrowings (TR 1912-13, attached as Ex. F). Mr. Leigh characterized this as a "conservative estimate," based upon the facts that: (a) During the period in question, Bio-Rad borrowed money from banks at a rate of interest generally linked to the prime lending rate (the "prime rate"), which fluctuated between 11% and 21%; and (b) In August 1980, Bio-Rad also borrowed money by issuing corporate bonds, on which the coupon rate is 15% (Ex. F).

The following chart (based on statistics published in Federal Reserve Bank reports) sets forth the average Long Term Corporate Bond Rate and bank lending Prime Rate which have prevailed in the marketplace for each of the past five years. This chart demonstrates that Mr. Leigh's testimony as to rates of interest paid by Bio-Rad is consistent with commercial rates of interest which actually prevailed in the marketplace during the period in question.

CASE A: 15% FLAT

NICOLET PREJUDGMENT INTEREST

For Period 1980—1985

	1980	1981	1982	Pre-Judgment 1983	Post-Judgment 1983	1984	1985
Cumulative Damages	$ 0.00	$ 372,065.95	$1,623,560.46	$3,078,000.02	$ 0.00(3)	$ 0.00	$ 0.00
Cumulative Interest	$ 0.00	$ 16,360.71	$ 168,486.80	$ 546,376.85	$556,803.14	$638,721.85	$734,530.13
Total Beginning Balance	$ 0.00	$ 388,426.66	$1,792,047.26	$3,624,376.87	$556,803.14	$638,721.85	$734,530.13
Damages for Year	$372,065.95	$1,251,494.51	$1,454,439.56	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total Ending Balance	$372,065.95	$1,639,921.17	$3,246,486.82	$3,624,376.87	$556,803.14	$638,721.85	$734,530.13
Average Outstanding Balance(1)	$186,032.98	$1,014,173.91	$2,519,267.04	$3,624,376.87	$556,803.14	$638,721.85	$734,530.13
Days Outstanding	214(4)	365	365	7(3)	358	365	90(5)
Interest Rate(6)	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Interest for the year(2)	$ 16,360.71	$ 152,126.09	$ 377,890.06	$ 10,426.29	$ 81,918.71	$ 95,808.28	$ 27,167.55
Total Interest Owed to Bio-Rad Laboratories							$761,697.68

(1) Average Outstanding Balance = (Beginning Balance + Ending Balance) / 2
(2) Interest for the Year = Average Outstanding Balance × (Interest Rate/100) × (Days Outstanding/365)
(3) The effective date of the judgment (1/7/83) marks the end of the time when prejudgment interest runs on the principal amount of the judgment ($3,078,000). Therefore, this amount is deducted from the principal as of 1/7/83.
(4) Interest is calculated from 6/1/80 when the first deliveries occurred.
(5) Interest is calculated through 3/31/85. Additional interest accrues at the rate of $ per day thereafter.
(6) Interest Rate = Assumed 15%

CASE B: CORPORATE BOND RATE

NICOLET PREJUDGMENT INTEREST

For Period 1980—1985

	1980	1981	1982	Pre-Judgment 1983	Post-Judgment 1983	1984	1985
Cumulative damages	$ 0	$ 372,066	$1,623,560	$3,078,000	$ 0	$ 0	$ 0
Cumulative interest	$ 0	$ 13,907	$ 166,272	$ 542,319	$551,192	$620,284	$703,960
Total beginning balance	$ 0	$ 385,973	$1,789,832	$3,620,319	$551,192	$620,284	$703,960
Damages for year	$372,066	$1,251,495	$1,454,440	$ 0	$ 0	$ 0	$ 0
Total ending balance	$372,066	$1,637,467	$3,244,272	$3,620,319	$551,192	$620,284	$703,960
Average outstanding balance(1)	$186,033	$1,011,720	$2,517,052	$3,620,319	$551,192	$620,284	$703,960
Days outstanding	214(4)	365	365	7(3)	358	365	90(5)
Interest rate(6)	12.75%	15.06%	14.94%	12.78%	12.78%	13.49%	12.10%
Interest for the year(2)	$ 13,907	$ 152,365	$ 376,048	$ 8,873	$ 69,091	$ 83,676	$ 21,003
Total interest owed to Bio-Rad Laboratories							$724,963

(1) Average Outstanding Balance = (Beginning Balance + Ending Balance)/2

(2) Interest for the Year = Average Outstanding Balance × (Interest Rate/100) × (Days Outstanding/365)

(3) The effective date of the judgment (1/7/83) marks the end of the time when prejudgement interest runs on the principal amount of the judgement ($3,078,000). Therefore, this amount is deducted from the principal as of 1/7/83.

(4) Interest is calculated from 6/1/80 when the first deliveries occurred.

(5) Interest is calculated through 3/31/85. Additional interest accrues at the rate of $233.37 per day thereafter.

(6) Interest Rate = Average Long Term Corporate Bond Rate

SCHEDULE C

CASE C: PRIME

NICOLET PREJUDGMENT INTEREST

For Period 1980—1985

	1980	1981	1982	Pre-Judgment 1983	Post-Judgment 1983	1984	1985
Cumulative damages	$ 0	$ 372,066	$1,623,560	$3,078,000	$ 0(3)	$ 0	$ 0
Cumulative interest	$ 0	$ 16,655	$ 208,085	$ 587,821	$595,407	$658,419	$736,639
Total beginning balance	$ 0	$ 388,721	$1,831,646	$3,665,821	$595,407	$658,419	$736,639
Damages for year	$372,066	$1,251,495	$1,454,440	$ 0	$ 0	$ 0	$ 0
Total ending balance	$372,066	$1,640,216	$3,286,085	$3,665,821	$595,407	$658,419	$736,639
Average outstanding balance(1)	$186,033	$1,014,468	$2,558,866	$3,665,821	$595,407	$658,419	$736,639
Days outstanding	214(4)	365	365	7(3)	358	365	90(5)
Interest rate(6)	15.27%	18.87%	14.84%	10.79%	10.79%	11.88%	10.56%
Interest for the year(2)	$ 16,655	$ 191,430	$ 379,736	$ 7,586	$ 63,012	$ 78,220	$ 19,181

Total interest owed to Bio-Rad Laboratories $755,820

(1) Average Outstanding Balance = (Beginning Balance + Ending Balance)/2
(2) Interest for the year = Average Outstanding Balance × (Interest Rate/100) × (Days Outstanding/365)
(3) The effective date of the judgment (1/7/83) marks the end of the time when prejudgment interest runs on the principal amount of the judgement ($3,078,000). Therefore, this amount is deducted from the principal as of 1/7/83.
(4) Interest is calculated from 6/1/80 when the first deliveries occurred.
(5) Interest is calculated through 3/31/85. Additional interest accrues at the rate of $213.12 per day thereafter.
(6) Interest Rate = Average Prime Rate

Year	Average Annual Long-Term Corporate Bond Rates	Average Annual Prime Rate
1980	12.75[1]	15.27[2]
1981	15.06[1]	18.87[2]
1982	14.94[1]	14.84[2]
1983	12.78[1]	10.79[3]
1984	13.49[4]	11.88[3]
1985	12.10[4]	10.56[3]

Moreover, this chart illustrates that it is largely immaterial whether prejudgment interest is calculated (1) at 15%, as testified by Mr. Leigh; or (2) at either the Long Term Corporate Bond Rate or the Prime Rate (as some courts have done). Indeed, when the Corporate Bond Rate and Prime Rate are substituted in the prejudgment interest formula, the resulting interest figures ($724,963 and $755,820, respectively; see Schedules B and C, following Schedule A) are roughly equivalent to the interest figure which results when interest is calculated at 15% ($761,698). In short, while it can be argued that one interest rate is more appropriate than another, it makes little practical difference which commercial interest rates are employed.

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[1] Federal Reserve Bulletin, Table A26 "Domestic Financial Statistics," Dec. 1983 and Feb. 1985. Bond yields based on data from Moody's Investors Service (copies attached as Ex. H).

[2] U.S. Board of Governors, Federal Reserve System's Annual Statistical Digests for 1980, 1981, 1982 (attached as Ex. I).

[3] The latest Federal Reserve report does not include a calculation of the annual average prime rates for 1983, 1984 or 1985. Accordingly, for 1983 and 1984, Bio-Rad has used the sum of the average monthly prime rates for each of those years (Fed. Res. Bull., Table A24 "Dom. Fin. Stats.," Feb. 1985, Ex. J), divided by 12. For 1985, Bio-Rad has used the sum of the average monthly prime rates for the months of January and February 1985 (Fed. Res. Stat. Releases, Feb. 5 and Mar. 4, 1985, Ex. K), divided by 2.

[4] The latest Federal Reserve Bulletin (Feb. 1985) does not yet contain the 1984 average annual corporate bond rate, so Bio-Rad has calculated this as the sum of all Avg. Monthly Corporate Bond rates for 1984 (Ex. H), divided by 12. For 1985, Bio-Rad has used the sum of the average monthly bond rates for the months of Jan. and Feb. (Ex. K), divided by 2.

2. If Discovery And/Or Further Evidentiary Hearings Are Allowed, Bio-Rad Reserves The Right To Increase Its Claim For Prejudgment Interest To An Amount Which Would More Adequately Compensate Bio-Rad

If the Court were to reopen this case for further evidentiary hearings on the subject of prejudgment interest, Bio-Rad reserves the right to increase its claim to an amount which would more adequately compensate Bio-Rad for its lost use of the money damages. If put to specific proofs, Bio-Rad would show that it actually paid more than the 15% interest estimated by Peter Leigh during trial.[5] For example, although Bio-Rad's corporate bonds pay interest of 15%, Bio-rad's effective interest cost on its corporate bond borrowings is closer to 16% because of fees associated with the bond issue, which reduced the proceeds Bio-Rad received from the offering. In addition, while Bio-Rad's bank borrowing is "linked" to the prime rate, its effective bank borrowing rate is closer to 1% above the prime rate because the bank loan terms require Bio-Rad (1) to pay an additional fee based upon the unused portion of the loan commitment and (2) to maintain compensating balances. Further, Bio-Rad's calculation of prejudgment interest is computed on a compound annual basis, whereas the interest it pays on its bank loans is paid monthly (and thus compounds twelve times a year), and the interest it pays on its corporate bonds is paid twice annually (and thus compounds twice a year).

These additional facts would support a substantially higher claim for prejudgment interest. For example, if prejudgment interest were computed at an interest rate of prime plus 1%, compounded monthly (a rough approximation of Bio-Rad's actual bank lending arrangements), the total prejudgment interest owed to Bio-Rad by Nicolet as of March 31, 1985 would be $908,196 (see Schedule D on following page).

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[5] The 15% interest rate to which Peter Leigh testified was selected and expressly characterized as a "conservative" estimate which could be easily defended on cross-examination in front of the jury.

Despite the prospect of a substantially greater recovery, Bio-Rad objects to further discovery and evidentiary hearings. The Court has all the information it needs to make a proper determination of prejudgment interest. To proceed as Nicolet proposes might involve extensive discovery and evidence touching on all facets of Bio-Rad's business over the past five years. This would be costly, time-consuming, and would necessarily involve the Court in discovery disputes and evaluation of complex financial data. Since there is no need for such further proceedings, they would only serve to delay ultimate determination of this dispute, increase the cost of litigation, and waste judicial resources.

SCHEDULE D

CASE D: P+ 1—COMPOUNDED MONTHLY

NICOLET PREJUDGMENT INTEREST

For Period 1980—1985

	1980	1981	1982	Pre-Judgment 1983	Post-Judgment 1983	1984	1985
Cumulative Damages	$ 0.00	$ 372,065.95	$1,623,560.46	$3,078,000.02	$ 0.00(3)	$ 0.00	$ 0.00
Cumulative Interest	$ 0.00	$ 19,130.91	$ 240,654.68	$ 682,290.08	$691,267.29	$775,668.94	$881,689.09
Total Beginning Balance	$ 0.00	$ 391,196.86	$1,864,215.14	$3,760,290.10	$691,267.29	$775,668.94	$881,689.09
Damages For Year	$372,065.95	$1,251,494.51	$1,454,439.56	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Total Ending Balance	$372,065.95	$1,642,691.37	$3,318,654.70	$3,760,290.10	$691,267.29	$775,668.94	$881,689.09
Average Outstanding Balance(1)	$186,032.98	$1,016,944.12	$2,591,434.92	$3,760,290.10	$691,267.29	$775,668.94	$881,689.09
Days Outstanding	214(4)	365	365	7(3)	358	365	90(5)
Interest Rate(6)	17.54%	21.78%	17.04%	12.45%	12.45%	13.67%	12.19%
Interest For The Year(2)	$ 19,130.91	$ 221,523.76	$ 441,635.40	$ 8,977.21	$ 84,401.65	$106,020.15	$ 26,507.03
Total Interest Owed to Bio-Rad Laboratories							$908,196.12

(1) Average Outstanding Balance = (Beginning Balance + Ending Balance) / 2

(2) Interest For the Year = Average Outstanding Balance × (Interest Rate / 100) × (Days Outstanding /365)

(3) The Effective Date of the Judgment (1/7/83) Marks the End of the Time When Prejudgment Interest Runs on the Principal Amount of the judgment ($3,078,000). Therefore, this amount is deducted from the principal as of 1/7/83.

(4) Interest is calculated from 6/1/80 when the first deliveries occurred.

(5) Interest is calculated through 3/31/85. Additional interest accrues at the rate of $ per day thereafter.

(6) Interest rate = average prime rate plus 1% compounded monthly. (Calculated as the annual interest rate divided by 12 taken to the 12th power ((1+(R/12))^12-1.

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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

BIO-RAD LABORATORIES, INC.,
a Delaware corporation,

Plaintiff,

v.

NICOLET INSTRUMENT
CORPORATION,
a Wisconsin corporation,

Defendant

CIVIL ACTION NO.
C81 2553 LHB

BIO-RAD'S SUPPLEMENTAL MEMORANDUM IN SUPPORT OF MOTION TO AWARD PREJUDGMENT INTEREST

I.

INTRODUCTION

This memorandum, which supplements Bio-Rad's original Memorandum in Support of Motion to Award Prejudgment Interest under 35 USC § 284 (filed on or about April 11, 1985), provides a revised calculation of the total prejudgment interest owned Bio-Rad. This calculation has been reduced from $761,698 (through March 31, 1985) to $737,074 (through June 28, 1985), based upon the Court's rulings at the hearing on April 12, 1985. Interest from June 28, 1985 continues to accrue at the rate of $200.00 per day (Decl. P. Leigh).

The main differences in the present calculation are as follows:

(1) Rather than use the "Average Outstanding Balance" approach (BR Mem. 7:15-8:28), Bio-Rad has calculated interest separately on each infringing sale, as instructed by the Court (TR 74:10).

(2) Rather than calculate interest from the date of infringement (delivery date), Bio-Rad has calculated interest to run from a day 60 days after the delivery date. This takes into account the expected lag between delivery and payment, as instructed by the Court (TR 74:9-17).

(3) Rather than calculate interest at the 15% rate (from Bio-Rad's actual experience), Bio-Rad has calculated interest at the rate a "reasonably sound (average) corporate borrower" might have been expected to pay, as instructed by the Court (TR 72:24-73:3, 82:6-12). As an aid to determining that interest rate, Bio-Rad has enlisted the expert assistance of Richard T. Griffith, Chief Executive Officer of the Federal Reserve Bank of San Francisco (Decl. Griffith), who states, based upon statistics available to the Federal Reserve Bank, that the best indicia of what rate of interest the average corporate borrower

paid from 1980-1985 is the average annual Prime Rate, compounded annually. Accordingly, this is the rate of interest Bio-Rad has used.

II.

BACKGROUND

At the hearing on April 12, 1985, during the hearing on Nicolet's Motion For Allowance Of Discovery On The Issue Of Prejudgment Interest, the Court made a number of rulings, related to Bio-Rad's Motion for Prejudgment Interest (filed April 11, 1985).

First, Judge Burke granted Bio-Rad's Motion for Prejudgment Interest to Bio-Rad, subject to further decision on the rate of interest (TR 78:10-17); and instructed Bio-Rad to prepare a calculation of prejudgment interest based upon the rate of interest which a reasonably sound (average) corporate borrower would have been expected to pay during the years in question (TR 72:24-73:3, 82:6-12).

Judge Burke further indicated that, in setting the amount of prejudgment interest, he would not take into account Nicolet's argument that "We didn't sell as many units as we think the jury based its damage award on" (TR 77:17-21).

Judge Burke further indicated that interest ought to be calculated from the date of each infringement, perhaps adjusted by some amount attributable to the customary time lag between delivery and payment, e.g. 60 days (TR 74:9-17).

Finally, Judge Burke denied Nicolet's motion to take discovery, except to the extent necessary to determine the dates of infringement (TR 76:19-22).

III.

DISCUSSION

A. Damages Attributable To Each Infringing Sale

Because the jury awarded a general verdict of $3,078,000 without special findings as to the calculation used to reach that

verdict, there is no precise way to calculate the amount of damages the jury awarded per infringing sale. This is especially true because Nicolet contends that it only made 81 sales, but that the jury based its award upon 91 units.

To minimize the areas of dispute on the Motion for Prejudgment Interest, Bio-Rad offered to stipulate with Nicolet to spread the $3,078,000 judgment either over 91 units ($33,824 damages per unit) or over 81 units ($38,000 damages per unit).

Nicolet agreed to use 81 units as the base, but reserved its right to argue that the amount of prejudgment interest ought to be reduced because Nicolet believes the jury erred in its verdict[1].

B. Number Of Infringing Sales

As set forth above, Bio-Rad has calculated its claim for prejudgment interest on the basis of 81 infringing sales.

C. Date Of Each Infringing Sale

On the basis set forth in Paragraph A, *supra*, Bio-Rad has used, as the date for each infringing sale, the date of delivery of each of the 81 units (per Nicolet's Answer to Bio-Rad's Interrogatory With Regard To Prejudgment Interest).

D. Hypothetical Date On Which Bio-Rad Would Have Been Paid For Each Infringing Sale

In accordance with the Court's ruling at the hearing on April 12, 1985, (TR 74:9-17), Bio-Rad has calculated prejudgment interest to run from a day 60 days after each delivery of an infringing unit by Nicolet.

E. Interest Rate

In its opening memorandum, Bio-Rad proposed to use 15% (i.e. Bio-Rad's actual interest rate, as Peter Leigh testified

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[1] Bio-Rad does not object to Nicolet's right to any argument, but vigorously rejects the notion that Nicolet is entitled to any reduction in interest based upon an alleged error in the verdict. Any result to the contrary (a) would impeach the jury verdict, (b) is barred by res judicata, and (c) has already been resolved against Nicolet at the April 12 hearing (TR 77:17-21, 82:6-13).

at trial) as the applicable rate of prejudgment interest; although it made little difference whether Bio-Rad used its actual rate of interest or some other objectively determined commercial lending rate (e.g. the Corporate Bond Rate or the Prime Rate). The total prejudgment interest owed to Bio-Rad (through June 28, 1985), calculated at the Corporate Bond Rate, the Prime Rate, or the 15% rate, yielded roughly comparable results, i.e. $724,963; $755,820; or $761,698, respectively (Bio-Rad Memorandum 6/11/85, 5:1-6:7).

Nicolet objected to using any one of the foregoing commercial interest rates, arguing that the Court ought to apply some statutory rate. The Court rejected that approach, stating that it intended to use the rate of interest which a reasonably sound (average) corporate borrower would pay (TR 72:24-73:3, 82:6-12). Discussion centered around whether to use the Prime Rate or the Interbank Discount Rate plus some amount to adjust it so as to approximate the rate available to a corporate borrower (TR 82:11-12).

To assist the Court in determining what rate of interest a reasonably sound (average) corporate borrower would have paid during the period in question, Bio-Rad has enlisted the expert assistance of, Richard T. Griffith, Chief Executive Officer of the Federal Reserve Bank of San Francisco, who agreed to state his expert opinion for the assistance of the Court.

Mr. Griffith states that, based upon periodic survey data collected and published by the Federal Reserve, the Prime Rate, compounded annually[2], is the best approximate indicator of what the average corporate borrower paid on commercial borrowings in the years 1980 to the present. Specifically, Mr. Griffith notes that the average corporate borrower appears to have paid slightly more than the Prime Rate in 1980-82, and slightly less than the Prime Rate in 1983 and 1985, with 1984 about even. On balance, Mr. Griffith concludes that

> "the Prime Rate, compounded annually, appears to be the most representative indicator of what rate of interest the

[2] Based upon the average annual Prime Rate as published in the Federal Reserve Annual Digest and Bulletin.

reasonably sound (average) commercial/industrial borrower would have paid during the period in question."

(Decl. Griffith, 3:10-13)

Mr. Griffith contrasted the Prime Rate with the Discount Rate, Federal Funds (i.e. Interbank Discount) Rate, and Treasury Bill Rate, which Mr. Griffith said have been substantially lower than the rates paid by average corporate borrowers.

III.

CONCLUSION

For the foregoing reasons, Bio-Rad respectfully requests entry of judgment for prejudgment interest in a total amount of $737,074, through June 28, 1985, with interest accruing thereafter at the rate of $200.00 per day.

Dated: July 11, 1985

TOWNSEND and TOWNSEND

By _____

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Attorneys for Plaintiff

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JUL 15 1985
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UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

BIO-RAD LABORATORIES, INC. a Delaware corporation, *Plaintiff,* v. NICOLET INSTRUMENT CORPORATION a Wisconsin corporation, *Defendant*	**CIVIL ACTION NO. C81 2553 LHB** **EXPERT DECLARATION OF RICHART T. GRIFFITH IN SUPPORT OF PLAINTIFF BIO-RAD'S MOTION FOR PREJUDGMENT INTEREST**

I, Richard T. Griffith, declare and state that:

1. I am Chief Operating Officer and First Vice President of the Federal Reserve Bank of San Francisco.

2. I have been asked by Townsend and Townsend to provide my expert opinion as to whether and to what extent the Prime Rate, Discount Rate, Federal Funds Rate or any other

readily available index have corresponded to the rates of interest a reasonably sound corporate borrower, i.e. one of average financial strength, paid on commercial loans in each of the years from 1980 to the present.

3. Prior to agreeing to serve as an expert in this capacity, I consulted with legal counsel for the Federal Reserve Bank, who advised that I was free to do so.

4. My educational background includes attendance at California State University in San Luis Obispo; and at Pepperdine University in Los Angeles. I graduated from the American Institute of Banking in 1965; and also from a special Graduate School of Banking, at Stanford University, in 1972. I joined the Federal Reserve Bank of San Francisco in 1975. Since then, I have held numerous positions and was appointed to my present position in 1983.

5. The Federal Reserve Bank of San Francisco performs numerous banking operations, which include acting as a clearinghouse for interbank transfers and, in addition, the lending of funds to banks on a short-term basis. The Federal Reserve Bank of San Francisco also monitors lending conditions throughout the Twelfth Federal Reserve District and participates in setting the Discount Rate in furtherance of the Federal government's monetary policy, as set by the Federal Reserve Board in Washington, D.C.

6. The Federal Reserve Bank of San Francisco employs a number of economists on its staff to assist it in performing the above functions. In addition, the bank maintains a sizeable library of economic data and literature.

7. In my opinion, the best measure or indicator of the interest rate which a reasonably sound (i.e. average) corporate commercial and/or industrial borrower (i.e. not a real estate construction or real estate development borrower) would have paid in each of the years from 1980 to the present is the average annual Prime Rate[1], compounded annually. My opinion is

[1] As my measure of the annual Prime Rate for the years 1980 to 1983, I employ the annual average of daily Prime Rate published in the Annual Statistical Digest by the Board of Governors of the Federal Reserve; and for 1984 to the present, I employ a calculation based on the average monthly Prime Rate published in the Federal Reserve Bulletin.

necessarily qualified by the fact that there are no data to show what rate of interest the average corporate borrower has actually paid or is actually paying at any particular time, or for any particular period. In addition, the available data, which consists of statistical samples only, would indicate that the Prime Rate is not a perfect indicator, but only a rough indicator of the interest rate in question. Nevertheless, based on the available data, the Prime Rate, compounded annually, appears to be the most representative indicator of what rate of interest the reasonably sound (average) commercial/industrial borrower would have paid during the period in question.

8. The basis for my foregoing opinion is as follows:

(a) I have examined the Estimated Weighted Average Effective Interest Rates ("Weighted Average Rates") on commercial and industrial loans (other than for real estate construction or land development) made by all commercial banks. The weighted Average Rate is obtained from regular periodic Federal Reserve surveys of the terms of bank lending to business. These surveys are made during the first full business week in the mid-month of each quarter from a sample of 340 commercial banks of all sizes. The data are published in the Federal Reserve Statistical Release E2 (111)[2]. The Weighted Average Interest Rate is the approximate average compounded annual interest rate on each loan in the survey sample, calculated from survey data on the stated rate and other terms of the loan, with each loan being weighted by its dollar amount.

(b) I have also examined the Interquartile Range. Like the Weighted Average Interest Rate, the Interquartile Range is determined from data taken in the survey referred to in paragraph (a), *supra*. The Interquartile Range is the range of interest rates that encompasses the middle

[2] The survey data upon which the Weighted Average Interest Rate is based are the best available data available as to what rates of interest the average corporate borrower has actually paid during any given survey period; however, the survey data are collected for only four weeks out of the year. Accordingly, these data cannot be used to determine the prevailing rate of interest at any other times during the year.

50% of the total dollar amount of loans making up the Weighted Average Rate.

(c) The subject surveys are conducted at the mid-month of each quarter. For my comparison, I selected the February (first quarter) survey for each of the years 1980 through 1985, since this was the only time period for which the Federal Reserve also publishes the Interquartile Range.

(d) I compared the Weighted Average Rate and the mid-point of the Interquartile Range ("Mid-point") to the average monthly Prime Rate for the month of February in each of the years 1980 through 1985 to see the extent to which the survey data correspond to the Prime Rate. Based on this comparison, which is set out in Schedule A, attached as Exhibit A, I found that there has been a realtively close correspondence between the Federal Reserve survey data and the average monthly Prime Rate for the years 1980-1985. Specifically,

(i) The data shown in Column E of Schedule A compare the Weighted Average Interest Rate to the Prime Rate. From this it appears that while the Weighted Average Rate was slightly higher than the average monthly Prime Rate in 1980, 1981, 1982 and 1984, and slightly lower than the average monthly Prime Rate in 1983 and 1985, they nevertheless track one another with reasonably close correspondence.

(ii) The data shown in Column F of Schedule A compare the Mid-point of the Interquartile Range to the average monthly Prime Rate. Like the Weighted Average Rate, the Mid-point of the Interquartile Range was slightly higher than the average monthly Prime Rate in 1980, 1981 and 1982, and slightly lower than the average monthly Prime Rate in 1983, 1984 and 1985; however, they track one another with reasonably close correspondence.

(e) Neither the Discount Rate, the Federal Funds Rate, the Treasury Bill Rate, nor any other readily available index would be reliable as an indicator of what rate of

interest a reasonably sound (average) corporate borrower might have paid during each of the years 1980 up to the present, for the following reasons:

(i) The Discount Rate is the rate of interest charged on loans to member depository institutions by the twelve regional Federal Reserve Banks. Interest on such loans is charged daily.

(ii) The Federal Funds Rate, which might also be referred to as the "Interbank Discount Rate", is the rate of interest paid on reserves traded among commercial banks for overnight use in amounts of $1 million or more. In effect, the Federal Funds Rate is the rate of interest paid by commercial banks on overnight loans from other commercial banks. Like the Discount Rate, the Federal Funds Rate is a rate of interest paid by banks for large short-term loans, and it is charged daily.

(iii) The Treasury Bill ("T-Bill") Rate is the rate of interest paid by the Government on its auction of short-term U.S. Government bills, sold at a discount from face value in units of $10,000 to $1 million.

(iv) A reasonably sound (average) corporate borrower would be unable to borrow money at the Discount Rate, Federal Funds Rate, or T-Bill Rate, for the following reasons:

(1) The only borrower able to borrow money at the T-Bill Rate is the United States Government. The Government pays a substantially lower rate of interest than the average corporate borrower because the Government is considered the most credit-worthy of all borrowers. The T-Bill Rate is frequently 2-3% lower than the Prime Rate.

(2) The only borrowers able to borrow money at the Discount Rate are those institutions

specified in the Federal Reserve Act or other Federal legislation. These are essentially banks and other financial institutions.

(3) The only borrowers able to borrow money at the Federal Funds Rate are financial institutions. These are primarily commercial banks, savings and loans, and savings banks.

(4) The Discount Rate and Federal Funds Rate are each typically 2-3% lower than the rate paid by average corporate borrowers, because of the nature of the banking business itself. A primary function of a commercial bank is to lend money. A bank acquires the money it lends from several different sources, the foremost of which is funds deposited with the bank to earn interest. The bulk of such funds are deposited in return for interest-bearing Certificates of Deposit ("CD's"), although other lesser sources of funds include savings accounts and the like. Two of those lesser sources of funds are either loans from the Federal Reserve Bank at the Discount Rate, or loans (actually reserves) from other commercial banks for overnight use (i.e. Federal Funds).

(5) Interest a commercial lending bank pays to its sources of funds is a major cost of doing business for that bank. Other costs include items of general overhead such as rent, equipment, salaries, advertising, etc.

(6) A bank only lends money at lending rates intended to produce a profit, i.e. at rates which are sufficiently higher than the interest rate it pays on borrowed funds to cover the cost of overhead, plus produce a profit, taking into account the expected rate of loan failures. This explains why the rate of interest which a reasonably sound (average) corporate borrower pays

on commercial loans is substantially higher than the rate of interest (including the Discount Rate and Federal Funds Rate) which a bank pays for funds.

(7) Moreover, the Discount Rate would be a particularly unreliable indicator of what an average corporate borrower might pay, because the Discount Rate is set by the Federal Reserve to encourage expansions and/or contractions in the nation's money supply, in furtherance of Federal Reserve monetary policy. Thus, the Discount Rate is more of a barometer of Federal Reserve Policy, than of commercially available interest rates.

(f) To graphically illustrate that the Prime Rate appears to be a better indicator of what an average corporate borrower might pay than the Federal Funds Rate, the Discount Rate, or the T-Bill Rate, I have attached a Chart of Interest Rates (Exhibit B) which compares the average annual Prime Rate, Discount Rate[3], Federal Funds Rate[4], T-Bill Rate[5], estimated Weighted Average Interest Rate[6], and estimated Mid-point of Interquartile Range[7]. This Chart shows that the Prime Rate follows the survey data, i.e. the estimated Mid-point

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[3]As my measure of the Discount Rate for the years 1981-1983, I employ the annual average of the daily Discount Rate of the Federal Reserve Bank of New York as published in the Annual Statistical Digest of the Board of Governors of the Federal Reserve.

[4] As my measure of the Federal Funds Rate for the years 1980-83, I employ the annual average of the daily Federal Funds Rate as published in the Annual Statistical Digest of the Board of Governors of the Federal Reserve.

[5] As my measure of the T-Bill Rate for the years 1980-83, I employ the average annual auction average of one-year Treasury Bills, as published in the Annual Statistical Digest of the Board of Governors of the Federal Reserve.

[6] The estimated average annual Weighted Average Annual Interest Rate is the sum of the average annual Prime Rate and the differential between the Weighted Average and Prime Rate on the dates of the Federal Reserve surveys (from Schedule A, Column E).

[7] The estimated annual Mid-point of Interquartile Range is the sum of the average annual Prime Rate and the differential between the Mid-point of Interquartile Range and Prime Rate on the dates of the Federal Reserve surveys (Schedule A, Column F).

Interquartile Rate and estimated Weighted Average Rate, with far greater correspondence and consistency than the other indicators. The data from which the chart was prepared are set out in Schedule B, attached as Exhibit C.

I declare under penalty of perjury that the foregoing statements are true and correct.

Executed this 3rd day of July, 1985, at San Francisco, California.

Richard T. Griffith

SCHEDULE A

Short Term Commercial and Industrial Loans By All Commercial Banks (Excluding Construction And Land Development)

A	B	C		D		E	F
		Interquartile		Prime Rate			
Survey Date	Weighted Avg. Interest Rate (Avg'd Over Loan Sizes)	Range	Midpoint	Avg'd Over February	Avg'd Over The Year	Weighted Avg. Compared To Prime Rate	Mid-Point of Interquartile Range Compared To Prime Rate
2/4-9/80	5.67%	14.87-16.43%	15.65	15.63%	15.27%	+.07	+.02
2/2-7/81	19.91%	19.12-21.25%	20.18	19.43%	18.87%	+.48	+.75
2/1-6/82	17.13%	16.61-17.55%	17.08	16.56%	14.84%	+.57	+.52
2/7-11/83	10.20%	9.42-10.33%	9.88	10.98%	10.79%	-.78	-1.10
2/6-10/84	11.06%	10.45-11.24%	10.84	11.00%	12.05%	+.06	-.16
2/4-8/85	10.10%	9.14-10.54%	9.84	10.50%	N.A.	-.40	-.66

Exhibit A

SCHEDULE B

ANNUAL AVERAGE INTEREST RATES

Year	Weighted Avg. (Est.)	Midpoint Interquartile (Est.)	Prime Rate	Discount Rate	Federal Funds Rate	T-Bill Rate
1980	15.34	15.29	15.27	11.77	13.36	10.75
1981	19.35	19.62	18.87	13.42	16.38	13.16
1982	15.41	15.36	14.84	11.02	12.26	11.10
1983	10.01	9.69	10.79	8.50	9.09	8.86
1984	12.10	11.88	12.05	8.80	10.23	9.91

Exhibit B

INTEREST RATES (ANNUAL AVG.)